THE RATIONAL TREATMENT OF NON-MALIGNANT AND BORDER-LINE TUMORS OF THE BREAST.*

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REVIEWING the present status of the cancer question as compared to its position twenty years ago when I first became interested in it, it seems to me that I can identify only two facts of value that have developed, namely,—that cancer is steadily increasing in frequency; and that the only form of treatment of definite value and of increasing efficiency is wide removal at an early stage.

The value of all the investigations that have been and are now being conducted is not deprecated,—moreover I confidently hope that in the near future this hitherto unthankful task may reap the reward of a discovery that in value to humanity will outrank all previous achievements of science.

I am wondering, however, if, bewildered by the maze of attractive propositions regarding etiology and treatment arising almost daily, we have clung with sufficient tenacity to the one really reliable fact that has been demonstrated, namely,—that a cure is possible by early operation. I think not. For the mind of the public,—medical, or lay,—is ever on the alert for novelty,—that is the spirit of the age. Why waste any time over a fact which has been repeated monotonously for years when we can get excited over some dazzling achievements of radio-activity—or become delightfully entangled in the countless possibilities of sera and kindred attractive forms of therapeusis.

I think that if those who believe, as I always have, in the propositions here advanced, had expended only a small

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proportion of the energy that has been wasted in pushing these various Will-o'-the-wisps, in steadfastly, doggedly keeping the known facts and results on an equal footing in interest, this paper need not have been written. Although this essay contains not a single new feature I believe there is need of this and similar efforts to emphasize and develop the usefulness of our present known resources.

My plea in regard to neoplasms of the breast is,—that they should all be held to be malignant until their innocence is proved; and the complement is,—let no guilty tumor escape.

The generally accepted figures of the proportion of cancer to other tumors of the breast is eighty to eighty-five per cent. In that mere fifteen to twenty per cent. remaining, there will be other forms of malignancy such as sarcoma and a certain number of other conditions, disease, cyst or new growth which will eventually undergo transition into malignant changes. So in sporting parlance we have about nine chances to one against any given tumor being non-malignant.

What really interests us in the diagnosis of these tumors, is not the ordinary carcinoma of the breast, whose nature is hopelessly obvious to any one, because these cases will only very exceptionally be cured even by our most extraordinary efforts; they are usually doomed when we see them. It is the cases that may or may not be carcinoma that should be our chief concern. the cases so little pronounced that if really malignant they afford a reasonable chance for successful treatment.

It is in those relatively simple conditions that seem so clear, chronic or involution mastitis, adenomata and the several forms of cysts, that the danger lurks. For, believing that they surely represent these conditions we may let pass the golden moment when a beginning process absolutely unrecognizable except for the revelations of the microscope, might have been seized upon as a local disease and surely extirpated.

Moreover if we are right about the innocency of a given process at a given moment what guarantee have we that time will not produce those fatal changes which we know or should know may and so often do occur?

Is there anyone who can infallibly pronounce on the nature of such tumors of the breast? Certainly I cannot and I know of no one who is so qualified; the more the surgeon's knowledge of the subject the more will he distrust it. And yet how often do we hear of a physician whose yearly experience is limited to an occasional case confidently reassuring the patient that her "lump" is "nothing." He may be right *then,* but how about the future? And the patient who has been willingly assured that it is "nothing"—will she use any extraordinary haste in again seeking an opinion about the "nothing" which later and insidiously becomes *something,* that *something* which will cost her her life? The most cock sure individual (and therefore the most dangerous) is the one who goes a step further and "confirms" his diagnosis,—the prudent doctor who introduces a hypodermic needle and draws off fluid: "A simple cyst, just as I thought." How grateful to the anxious patient is this little short, simple word cyst,—"a bag of water"—surely it can't have any of the horrid possibilities of long words ending in *ma, tis,* or *um.*

While decrying the practitioner's attitude, I do not seek to fasten the blame on him. Are we who have experience, who ought to know, have we done our duty in making the position clear, is our attitude consistent? Have we offered a clean cut definite rule of conduct, have we created a standard? I think not or certainly not sufficiently so for the needs of the problem. Many good men have described the situation; but there can't be too much evidence, and there are those whose writings and teachings lack preciseness, and some whose vacillations may be offered as justification by those who wish to bolster up an unjustifiable procrastination. In the vocabulary of cancer, that delightful word conservatism, so successfully overworked, finds no place except for those we have abandoned.

What then do you recommend? someone will certainly ask now if he has had the patience to withhold his question so far. Will you cut out the tumor or the breast of any person without regard to the age, origin or course? Cer-

tainly not, but whatever else I may or may not do, I am going to investigate and so far as possible prove the nature of any of these manifestations whenever it is reasonably possible so to do. Then and not till then will I have done my full duty.

We have to consider the following questions:

First.—What are the dubious or border-line cases?

Second.—How shall we make the diagnosis?

Third.—What if any shall be the treatment?

As regards the first proposition, we have to deal with a limited number of conditions and relatively fewer cases, as unfortunately the immense majority of cases of tumor of the breast coming to the surgeon have cancer, written large and hopeless on them. Such and any tumors which so closely simulate cancer in their general characteristics should be removed any way; we shall only have to complete the diagnosis, as will be later described, in order to know how extensive an operation is required.

The smaller number remaining are made up of the various forms and combinations of adenoma, the several forms of cysts and the group of lesions classified as chronic mastitis or involution changes. Rarer conditions, such as the apparently primary tuberculosis, retromammary lipomata, hydatid disease and gummata must be borne in mind. The important feature to remember is that almost any of those processes is likely to become the seat of secondary changes and eventually become malignant after years of quietude when the patient approaches or reaches the carcinoma age.

Just as our chief concern is to forestall the development of cancer, so we may remain ultraconservative both as regards the necessity of obtaining an exact anatomical diagnosis and the application of radical treatment in individuals under twenty-five. True, cancer of the breast is very rarely seen younger than this age; but in the absence of clinical features of importance (rapid growth of sarcoma in young girls) we may hold these tumors to be innocent. Even up to thirty the indications are not urgent. Past thirty we should be

more vigilant and more aggressive. Past thirty-five we must assure ourselves definitely of the nature of the tumor, and in most cases forestall future changes for the worse. Forty and over is the definite carcinoma age—and at this stage not a single chance must be taken. So that in younger individuals we may content ourselves with our clinical diagnosis of innocent tumors, reserving only certain ones which are rapidly growing or have suspicious features attached to them for the more elaborate anatomical diagnosis.

How shall we make the diagnosis? It can be made with *certainty* only on an anatomical basis. That is by the removal of a *sufficient* section or sections for microscopical examination; and here comes a situation which requires to be defined clearly. A very small fragment of a malignant tumor (removed by any one of the devices favored for that purpose), will suffice to give a positive diagnosis. Now suppose we have a border-line tumor, remove a small fragment and get an anatomical diagnosis of a non-malignant growth—are we in any way better off than we were before? The answer must be emphatically,—No! in the majority of cases, for time and time again it has proven to be fallacious to trust to such a gamble as to whether a given portion of a tumor yields definite information of a latent focus of malignancy.

Certainly we do not want to trust in any of these border-line cases in older women, past thirty, to any hap-hazard form of investigation. Here the diagnosis must as a rule be confirmed by the form of operation which will here be recommended. This statement is particularly true as regards the use of the hypodermic needle which reveals the presence of a cyst: a cyst means epithelium playing a rôle which is abnormal, and even if it is not malignant it has all the possibilities of becoming so.

To recapitulate,—in younger individuals, say up to thirty, in the cases devoid of significant features we may rely on ordinary clinical findings; past that age it becomes more and more imperative to make the diagnosis certain; once arrived at the carcinoma age it can and must be made any-

how, as some form of interference must now be the rule. So that in the later group the procedures of diagnosis and treatment will be simultaneous. That is, a sufficient exposure of the diseased breast must be made by an incision for the demonstration, gross and microscopic, of its nature.

This procedure which will be described under the name of plastic resection, given to it by Dr. J. Collins Warren,[1] allows of a much freer application of diagnostic methods and more radical measures even in relatively benign conditions owing to the absence of mutilating or disfiguring features which distinguish other or even simpler methods.

Treatment.—Small stationary tumors which do not cause mental or physical disturbances in younger individuals up to thirty years of age may as a rule be disregarded, particularly so if occurring in young unmarried women and those whose social status and habits render active interference undesirable. Generally speaking, the more intelligent and receptive to advice and caution the individual, the more may she be "trusted" with her tumor. In the less favored class of society, those who may never seek or have occasion to receive further advice, we ought to shoulder the responsibility for them. If any of these tumors at any age or stage grows rapidly or quite steadily it ought to be removed if for no other reason than the necessity of anticipating severer operations proportionate to an increasing bulk.

Between thirty and thirty-five a definite lump will be better removed,—it represents distinctly a morbid process and every year brings the individual nearer to the time when she must not have abnormal processes in her breast.

Past thirty-five I would make no exceptions except for very definite reasons and assuredly *never* in any process which was increasing steadily.

The treatment of tumors of the breast by the operation

[1] Warren: "The Surgeon and the Pathologist," Journal of the American Medical Association, July 15, 1905; "Abnormal Involution of the Mammary Gland," American Journal of the Medical Sciences, April, 1907.

of "Plastic Resection" (J. Collins Warren), is the operation in which we have the possibility of giving relief to many conditions which we should otherwise be inclined to leave alone from dislike of proposing a disfiguring or mutilating procedure unless unequivocally necessary, and certainly our patients would be equally reluctant to entertain the idea.

The operation performed according to Professor's Warren's admirable technic should leave only a very fine scar, well hidden in the fold which the lower half of the breast makes with the chest wall,—that is, no visible scar under ordinary conditions. Small tumors or diseased areas may be exsected without material change in the contour of the gland and even the removal of considerable portions may result in a minimum of disfigurement if one skilfully "reconstructs" the organ according to Dr. Warren's directions.

The operation has been so well described by Dr. Warren and others that only a very brief description of it is necessary here. Those unfamiliar with it are recommended to refer to the original articles, also Dr. W. L. Rodman's valuable work on the breast which contains admirable plates showing the exquisite cosmetic results obtainable.

The cutaneous incision is made in an exact half circle, the central point being at the lowest portion of the reflection of the breast on the chest wall. It is sufficient for access to any part, even the uppermost, of the breast, which can be tilted on its horizontal axis so that the under surface is dislocated into the wound. To obtain access to processes situated lower down or more to one side than the other, one or both legs of the ascending curve may be shortened, or a quarter circle may suffice. It is well to make the incision rather higher on the breast than below it, as the overhanging breast will more effectually conceal the scar. The incision is deepened till the fascia of the pectoral muscle is *reached;* it should not be cut. The interposed distinct layer of aveolar tissue yields to a stroke or two of the scalpel and the breast is easily and completely mobilized. It is grasped by the left hand, the thumb being on the under surface. By depressing the fingers

FIG. 1.

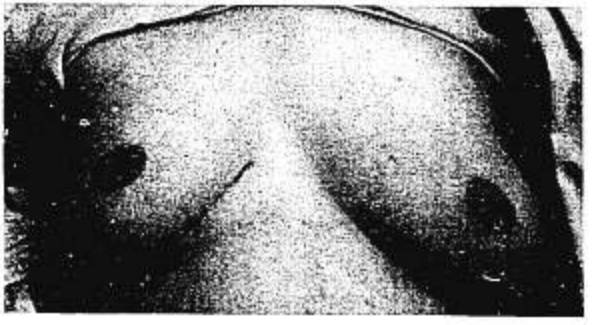
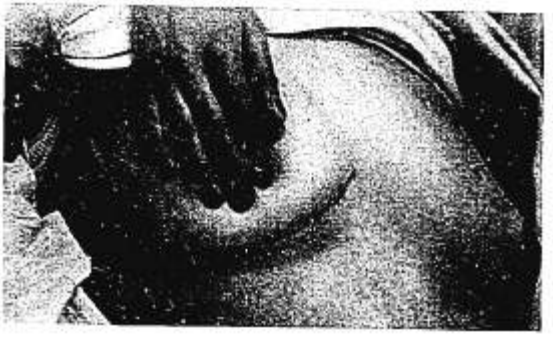


FIG. 2.



and elevating the thumb the whole under surface of the breast becomes accessible to sight and touch.

The essential step of the operation is now performed. The surgeon selects the portion of tumor or tissue which appears to be the most affected, exsects it, and gives it to the waiting pathologist, who with his present technic (frozen section) can give him a satisfactory report in five minutes. Having, however, gone so far in his procedures, the surgeon will probably wish to remove the visibly changed tissue even if the microscopical diagnosis eliminates malignancy. Some discretion may well be exercised regarding the extent of tissue to be removed when the necessity of preserving cosmetic ideals comes in question. Should the report show malignancy the operator can quickly proceed to perform the kind of operation suitable to the condition.

In removing the tumor or disease, the operator will find it better to cut it out by wedge-shaped incisions ("cutting pieces of pie" is the expression Dr. Warren used when demonstrating the method to me). If there are separate foci, less destruction of the breast tissue will result from the making of multiple wedges. Generally speaking it will be wiser to go no nearer the periphery than is absolutely necessary. These lacunæ in the breast resulting from excision as above described are obliterated by uniting their cut edges with catgut sutures. By the exercise of a little ingenuity this process of "snuggling" up the tissues will often result in a quite perfect contour of the organ. Dr. Warren lays great stress on the "reconstruction" which tends to push the apex of the breast,—the nipple,—forward.

The most careful hemostasis is necessary as it will be best to dispense with drainage. I always close such wounds by putting in a few interrupted sutures in the subcutaneous fat, and using the finest interrupted silk sutures for the skin; these are removed at intervals,—most of them in three days.

The application of the dressings should aim at preserving the cosmetic requirements by proper support.

Such an operation need keep a patient in bed for only

a day or two, the wound should heal kindly and firmly in about eight days.

Result.—Very little, often no disfigurement, the patient is definitely rid of her trouble, and we have not only replaced doubt by certainty, but also made a distinct advance in the *prophylaxis* of cancer.

My personal experience of this operation has been most gratifying, and the gratitude and appreciation of the patients has been marked.

The views and the line of treatment which I have outlined will doubtless seem ultraradical to some, perhaps many, physicians. I doubt, however, if I need to apologize for this attitude, as it is sufficiently upheld by many sound surgeons. I believe it is only a question of time when such views will constitute the only "safe and sane" line of conduct applicable to these dubious or border-line cases. On the principle of the greatest good to the greatest number, their adoption can only make for improvement in our results.

Of those who may question the necessity of such an inflexible line of conduct, I would ask: Can you deny the truth of this proposition,—the systematic adoption of the measures herein advocated will reduce the number of deaths from cancer of the breast?